



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,585	04/22/2004	Alan Thomas Schachtely	136239	6713

7590 06/21/2007
John S. Beulick
Armstrong Teasdale LLP
Suite 2600
One Metropolitan Square
St. Louis, MO 63102

EXAMINER

GAMI, TEJAL

ART UNIT	PAPER NUMBER
----------	--------------

2121

MAIL DATE	DELIVERY MODE
-----------	---------------

06/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/829,585

Applicant(s)

SCHACHTELY ET AL.

Examiner

Tejal J. Gami

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responsive to an AMENDMENT entered April 2, 2007 for the patent application 10/829585.

Status of Claims

2. Claims 1-42 were rejected in the last Office Action dated January 9, 2007.

As a response to the January 9, 2007 office action, Applicant has amended Claims 1, 7-8, 15, 22, 29, and 35-36.

Claims 1-42 are now pending in this office action.

Drawing Objections

3. Examiner thanks Applicant for amending the drawings and specification in response to the objections of the previous office action. Those objections have been withdrawn.

Claim Rejections - 35 USC § 112

4. Examiner thanks Applicant for providing sufficient antecedent basis for limitation in the claims. Those rejections have been withdrawn.

Claim Rejections - 35 USC § 101

5. Examiner thanks Applicant for meeting the conditions of 35 U.S.C. 101 for the claims. Those rejections have been withdrawn.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Bahrs et al. (U.S. Patent Number 6,654,932).

As to independent claim 1, Bahrs discloses a computer-implemented method of managing a machinery monitoring system (see Col. 12, Lines 5-16), said method comprising:

relating an asset output to at least one asset input (see Col. 36, Lines 53-63);

generating at least one rule (e.g., take a user-inputted string and generates an output) based on the relation (see Col. 21, Lines 34-55; Col. 32, Line 63 to Col. 33, Line 15; and Col. 36, Lines 53-63);

selecting at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied asset data to test (e.g., validate) the at least one rule (e.g., take a user-inputted string and generates an output) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15);

testing (e.g., validate) the at least one rule (e.g., take a user-inputted string and generates an output) incrementally using the selected asset data (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15);

monitoring the output of the at least one rule (e.g., take a user-inputted string and generates an output) at each increment (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15); and

outputting a test result (e.g., ValidationRuleException) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15).

As to independent claim 15, Bahrs discloses a computer-implemented machinery monitoring system for a plant (see Col. 12, Lines 5-16), said system comprising:

a client system comprising a user interface (see Col. 14, Lines 3-19);

a database for storing Rule Sets (see Col. 1, Lines 17-27 and Col. 31, Lines 49-53), wherein the Rule Sets (e.g., ValidationRule) include at least one rule expressed as a relational expression of a real-time data output relative to a real-time data input (e.g.,

Art Unit: 2121

take a user-inputted string and generates an output), wherein the relational expression is specific to a plant asset (e.g., business validation rule) (see Col. 32, Line 63 to Col. 33, Line 15); and

a processor programmed to control said machinery monitoring system to (see Col. 12, Lines 17-44), said processor programmed to:

prompt a user for a security control password (see Col. 62, Lines 21-55);

generate a plant asset operational rule (e.g., validation rule) from an application expert (see Col. 21, Lines 34-55; Col. 32, Line 63 to Col. 33, Line 15; and Col. 36, Lines 53-63);

test (e.g., validate) said rule based on at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied data (e.g., take a user-inputted string and generates an output) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15);

display incremental results of said test (see Col. 21, Lines 34-55); and

output a test result (e.g., ValidationRuleException) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15).

As to independent claim 29, Bahrs discloses a computer program embodied on a computer readable medium for managing a machinery monitoring system (see Col. 12, Lines 5-16) using a server system coupled to a client system and a database (see Col. 12, Lines 17-44), said client system including a user interface (see Col. 14, Lines 3-19), said program comprising a code segment that prompts a user for a security control password (see Col. 62, Lines 21-55) and then:

generates a plant asset operational rule (e.g., take a user-inputted string and generates an output) from an application expert (see Col. 21, Lines 34-55; Col. 32, Line 63 to Col. 33, Line 15; and Col. 36, Lines 53-63);

tests (e.g., validate) said rule based on at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied data (e.g., take a user-inputted string and generates an output) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15);

displays incremental results of said test (see Col. 21, Lines 34-55); and
outputs said results of said test (e.g., ValidationRuleException) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15).

As to dependent claim 2, Bahrs teaches a method in accordance with claim 1 further comprising bundling the at least one rule into a Rule Set that includes a Rule Set encryption code (see Col. 28, Lines 17-24 and Col. 31, Lines 7-16).

As to dependent claim 3, Bahrs teaches a method in accordance with claim 2 wherein bundling the at least one rule into a Rule Set comprises bundling a plurality of rules into an XML file (see Col. 64, Line 60 to Col. 65, Line 4).

As to dependent claim 4, Bahrs teaches a method in accordance with claim 2 wherein bundling the at least one rule into a Rule Set comprising bundling at least one of a rule documentation page and a Rule Set documentation page into the Rule Set (see Col. 65, Line 66 to Col. 66, Line 15).

As to dependent claim 5, Bahrs teaches a method in accordance with claim 1 further comprising:

transmitting the Rule Set (e.g., validation rules) to the machinery monitoring system (see Col. 21, Lines 34-56);

decrypting (e.g., translation) the Rule Set encryption (see Col. 28, Lines 17-24);
and

importing the Rule Set into the monitoring system (see Col. 28, Lines 24-42).

As to dependent claim 6, Bahrs teaches a method in accordance with claim 5 wherein importing the Rule Set (see Col. 28, Lines 24-42) comprises:

locating Rule Set files (see Col. 28, Lines 4-16);

prompting a user for an encryption key (see Col. 31, Lines 7-16); and

interpreting the Rule Set file (see Col. 28, Lines 17-23).

As to dependent claim 7, Bahrs teaches a method in accordance with claim 6 further comprising:

entering Rule Set information into an enterprise database (see Col. 65, Lines 5-24); and

refreshing a list of Rule Sets based on the Rule Set information (e.g., validation rules) (see Col. 21, Lines 34-56).

As to dependent claim 8, Bahrs teaches a method in accordance with claim 5 wherein importing the Rule Set (see Col. 28, Lines 24-42) comprises:

checking an enterprise for an existing copy of the imported Rule Set (see Col. 31, Lines 28-31);

selectively updating any of the existing Rule Sets if the imported Rule Set is a different version than the existing Rule Set (see Col. 48, Line 58 to Col. 49, Line 8); and

updating assets using the imported Rule Set (see Col. 48, Line 58 to Col. 49, Line 8).

As to dependent claim 9, Bahrs teaches a method in accordance with claim 5 further comprising substantially preventing importing the Rule Set into the monitoring system unless an authorized encryption key is used (see Col. 31, Lines 7-16).

As to dependent claim 10, Bahrs teaches a method in accordance with claim 1 wherein relating an asset output to at least one input comprises relating a measurable machine asset output to at least one input (see Col. 36, Lines 53-63).

As to dependent claim 11, Bahrs teaches a method in accordance with claim 1 wherein relating an asset output to at least one input comprises relating a measurable machine asset output to at least one input wherein the at least one input is indicative of a machine asset anomalous behavior (see Col. 31, Lines 7-16).

As to dependent claim 12, Bahrs teaches a method in accordance with claim 1 wherein generating at least one rule comprises resolving the operands for the at least one rule (see Col. 21, Lines 34-55; Col. 32, Line 63 to Col. 33, Line 15; and Col. 36, Lines 53-63).

As to dependent claim 13, Bahrs teaches a method in accordance with claim 1 wherein generating at least one rule comprises documenting the rule logic for the at least one rule (see Col. 65, Line 66 to Col. 66, Line 15).

As to dependent claim 14, Bahrs teaches a method in accordance with claim 1 wherein relating an asset output to at least one input comprises prompting the user to enter a security control password (see Col. 31, Lines 7-16).

As to dependent claim 16, Bahrs teaches a system in accordance with claim 15 wherein said processor is further programmed to bundle the at least one rule into a Rule Set that includes a Rule Set encryption code (see Col. 28, Lines 17-24 and Col. 31, Lines 7-16).

As to dependent claim 17, Bahrs teaches a system in accordance with claim 16 wherein said processor is further programmed to bundle a plurality of rules into an XML file (see Col. 64, Line 60 to Col. 65, Line 4).

As to dependent claim 18, Bahrs teaches a system in accordance with claim 16 wherein said processor is further programmed to bundle at least one of a rule documentation page and a Rule Set documentation page into said Rule Set (see Col. 65, Line 66 to Col. 66, Line 15).

As to dependent claim 19, Bahrs teaches a system in accordance with claim 15 wherein said processor is further programmed to:

transmit said Rule Set (e.g., validation rules) to said at least one machinery monitoring system (see Col. 21, Lines 34-56);

decrypt (e.g., translation) said Rule Set encryption (see Col. 28, Lines 17-24);
and

import said Rule Set into said at least one monitoring system (see Col. 28, Lines 24-42).

As to dependent claim 20, Bahrs teaches a system in accordance with claim 19 wherein said processor is further programmed to:

locate Rule Set files (see Col. 28, Lines 4-16);

prompt a user for an encryption key (see Col. 31, Lines 7-16); and
interpret said Rule Set file (see Col. 28, Lines 17-23).

As to dependent claim 21, Bahrs teaches a system in accordance with claim 20 wherein said processor is further programmed to:

enter Rule Set information into said database (see Col. 65, Lines 5-24); and
refresh a list of Rule Sets based on said Rule Set information (see Col. 65, Lines 5-24).

As to dependent claim 22, Bahrs teaches a system in accordance with claim 19 wherein said processor is further programmed to:

check said database for an existing copy of said imported Rule Set (see Col. 31, Lines 28-31);

selectively update any of said existing Rule Sets if said imported Rule Set is a different version than said existing Rule Set (see Col. 48, Line 58 to Col. 49, Line 8);

and

update assets using said imported Rule Set (see Col. 48, Line 58 to Col. 49, Line 8).

As to dependent claim 23, Bahrs teaches a system in accordance with claim 19 wherein said processor is further programmed to substantially prevent importing said Rule Set into said at least one monitoring system unless an authorized encryption key is used (see Col. 31, Lines 7-16).

As to dependent claim 24, Bahrs teaches a system in accordance with claim 15 wherein said processor is further programmed to relate a measurable machine asset output to at least one input (see Col. 36, Lines 53-63).

As to dependent claim 25, Bahrs teaches a system in accordance with claim 15 wherein said processor is further programmed to relate a measurable machine asset output to at least one input that is indicative of a machine asset anomalous behavior (see Col. 31, Lines 7-16).

As to dependent claim 26, Bahrs teaches a system in accordance with claim 15 wherein said processor is further programmed to resolve the operands for the at least one rule (see Col. 21, Lines 34-55; Col. 32, Line 63 to Col. 33, Line 15; and Col. 36, Lines 53-63).

As to dependent claim 27, Bahrs teaches a system in accordance with claim 15 wherein said processor is further programmed to receive, from a user, documentation of the rule logic for said at least one rule (see Col. 65, Line 66 to Col. 66, Line 15).

As to dependent claim 28, Bahrs teaches a system in accordance with claim 15 wherein said processor is further programmed to prompt the user to enter a security control password (see Col. 31, Lines 7-16).

As to dependent claim 30, Bahrs teaches a computer program in accordance with claim 29 further comprising a code segment that bundles said at least one rule into a Rule Set that includes a Rule Set encryption code (see Col. 28, Lines 17-24 and Col. 31, Lines 7-16).

Art Unit: 2121

As to dependent claim 31, Bahrs teaches a computer program in accordance with claim 30 further comprising a code segment that bundles a plurality of rules into an XML file (see Col. 64, Line 60 to Col. 65, Line 4).

As to dependent claim 32, Bahrs teaches a computer program in accordance with claim 30 further comprising a code segment that bundles at least one of a rule documentation page and a Rule Set documentation page into said Rule Set (see Col. 65, Line 66 to Col. 66, Line 15).

As to dependent claim 33, Bahrs teaches a computer program in accordance with claim 29 further comprising a code segment that:

transmits said Rule Set (e.g., validation rules) to said at least one machinery monitoring system (see Col. 21, Lines 34-56);

decrypts (e.g., translation) said Rule Set encryption (see Col. 28, Lines 17-24);
and

imports said Rule Set into said at least one monitoring system (see Col. 28, Lines 24-42).

As to dependent claim 34, Bahrs teaches a computer program in accordance with 33 further comprising a code segment that:

locates Rule Set files (see Col. 28, Lines 4-16);

prompts a user for an encryption key (see Col. 31, Lines 7-16); and

interprets said Rule Set file (see Col. 28, Lines 17-23).

As to dependent claim 35, Bahrs teaches a computer program in accordance with claim 34 further comprising a code segment that:

Art Unit: 2121

enters Rule Set information into an enterprise database (see Col. 65, Lines 5-24); and

refreshes a list of Rule Sets based on said Rule Set information (e.g., validation rules) (see Col. 21, Lines 34-56).

As to dependent claim 36, Bahrs teaches a computer program in accordance with claim 33 further comprising a code segment that:

checks an enterprise database for an existing copy of said imported Rule Set (see Col. 31, Lines 28-31);

selectively updates any of said existing Rule Sets if said imported Rule Set is a different version than said existing Rule Set (see Col. 48, Line 58 to Col. 49, Line 8); and

updates assets using said imported Rule Set (see Col. 48, Line 58 to Col. 49, Line 8).

As to dependent claim 37, Bahrs teaches a computer program in accordance with claim 33 further comprising a code segment that substantially prevents importing said Rule Set into said at least one monitoring system unless an authorized encryption key is used (see Col. 31, Lines 7-16).

As to dependent claim 38, Bahrs teaches a computer program in accordance with claim 29 further comprising a code segment that relates a measurable machine asset output to at least one input (see Col. 36, Lines 53-63).

As to dependent claim 39, Bahrs teaches a computer program in accordance with claim 29 further comprising a code segment that relates a measurable machine

Art Unit: 2121

asset output to at least one input wherein said at least one input is indicative of a machine asset anomalous behavior (see Col. 31, Lines 7-16).

As to dependent claim 40, Bahrs teaches a computer program in accordance with claim 29 further comprising a code segment that resolves the operands for said at least one rule (see Col. 21, Lines 34-55; Col. 32, Line 63 to Col. 33, Line 15; and Col. 36, Lines 53-63).

As to dependent claim 41, Bahrs teaches a computer program in accordance with claim 29 further comprising a code segment that receives, from a user, documentation of the rule logic for said at least one rule (see Col. 65, Line 66 to Col. 66, Line 15).

As to dependent claim 42, Bahrs teaches a computer program in accordance with claim 29 further comprising a code segment that prompts the user to enter a security control password (see Col. 31, Lines 7-16).

Response to Arguments

8. Applicant's amendment and arguments filed April 2, 2007 have been fully considered. The amendment does not overcome the original art rejection and the arguments are not persuasive. The following are the Examiner's observations in regard thereto.

Applicant Argues:

Bahrs does not describe nor suggest testing at least one rule incrementally using selected asset data. Rather, Bahrs describes selecting a validation rule to test user-inputted data.

Examiner Responds:

Art Unit: 2121

Examiner agrees that Bahrs teaches a validation rule to test user-inputted data.

However, Bahrs also teaches testing at least one rule incrementally using selected asset data. A "rule" as defined in Applicant's specification Paragraph [0004] is simply "relating an asset output to at least one asset input." Bahrs teaches testing (i.e., validating) this relationship using data. Because no other limitations to further limit the term "rule" are set forth in the claims, the claims as written are anticipated by the prior art.

Claims 1, 15 and 29 draw the same argument, see office action and response above.

Applicant Argues:

Bahrs does not describe nor suggest a system that includes Rule Sets that include at least one rule expressed as a relational expression of a real-time data output relative to a real-time data input, wherein the relational expression is specific to a plant asset. Rather, Bahrs describes business validation rules that edit and/or normalize user-inputted data.

Examiner Responds:

Bahrs teaches Rule Sets (e.g., ValidationRule) that include at least one rule expressed as a relational expression of a real-time data output relative to a real-time data input (e.g., take a user-inputted string and generates an output), wherein the relational expression is specific to a plant asset (e.g., business validation rule) (see Col. 32, Line 63 to Col. 33, Line 15). Under such considerations, the claims as written are anticipated by the prior art.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tejal J. Gami whose telephone number is (571) 270-1035. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2121

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Anthony Knight
Supervisory Patent Examiner
Tech Center 2100

TJG

TJG